

**PENGEMBANGAN LKPD KOMIK IPA DENGAN PENDEKATAN  
SAINS TEKNOLOGI MASYARAKAT LINGKUNGAN  
UNTUK MENINGKATKAN *PROBLEM SOLVING*  
DAN SIKAP PEDULI TERHADAP LINGKUNGAN**

Oleh  
**Annisa Nur Afifah**  
**NIM. 13312244033**  
**ABSTRAK**

Penelitian ini bertujuan untuk mengetahui: (1) pengembangan LKPD Komik IPA yang layak menurut dosen ahli dan guru IPA; (2) kemampuan *problem solving*; dan (3) ketercapaian sikap peduli terhadap lingkungan setelah menggunakan LKPD Komik IPA dengan pendekatan sains teknologi masyarakat lingkungan.

Penelitian ini merupakan penelitian pengembangan (R&D) dengan model 4-D. Tahap-tahap penelitian ini meliputi tahap *define* (pendefinisian), *design* (perancangan), *develop* (pengembangan), dan *disseminate* (penyebarluasan). Subjek penelitian adalah peserta didik kelas VIID SMP Negeri 1 Berbah. Instrumen penelitian yang digunakan meliputi lembar validasi LKPD komik IPA dan angket respon peserta didik untuk menilai kelayakan LKPD komik IPA; instrumen lembar observasi keterlaksanaan pembelajaran digunakan untuk mengetahui keterlaksanaan pembelajaran STML; instrumen *pretes-posttest* kemampuan *problem solving*, lembar observasi *problem solving* digunakan untuk mengetahui peningkatan kemampuan *problem solving* dan lembar observasi sikap peduli terhadap lingkungan digunakan untuk mengetahui ketercapaian sikap peduli terhadap lingkungan. Data kelayakan LKPD komik IPA dianalisis menggunakan konversi menjadi empat kategori; data keterlaksanaan pembelajaran dianalisis menggunakan konversi persentase keterlaksanaan dengan 5 kategori; data *pretes-posttest problem solving* dianalisis menggunakan *gain score*; serta data hasil kemampuan *problem solving* dan data observasi sikap peduli terhadap lingkungan dianalisis menggunakan konversi persentase lima kategori.

Hasil penelitian adalah (1) Pengembangan LKPD komik IPA dengan pendekatan STML layak sebagai bahan ajar dengan kategori sangat baik menurut dosen ahli dan guru IPA; (2) LKPD komik IPA dapat meningkatkan keterampilan *problem solving* dibuktikan dengan hasil perhitungan dengan *gain score* dengan kategori sedang, didukung berdasarkan hasil observasi yang mengalami peningkatan dari kategori cukup baik menjadi kategori sangat baik; (3) ketercapaian sikap peduli terhadap lingkungan dalam kategori sangat baik.

Kata Kunci: LKPD komik IPA, STML, *Problem solving*, Sikap peduli terhadap lingkungan

**DEVELOPMENT COMIC SCIENCE WORKSHEET WITH SCIENCE  
ENVIRONMENT TECHNOLOGY SOCIETY TO INCREASE PROBLEM  
SOLVING AND CARE ATTITUDE ABOUT ENVIRONMENT**

**Created by  
Annisa Nur Afifah  
NIM 13312244033**

**ABSTRACT**

*This study aims to determine: (1) the development a viable comic worksheet according to expert lecturers and science teachers; (2) improving problem solving skills; and (3) achievement of care attitude about environment after using comic science worksheet with science environment technology society approach.*

*This study is a research & development (R & D) with 4-D models. The stages of this study include the define phase (definition), design (design), develop (development), and disseminate (dissemination). The subjects for this study were VIII grade students of SMP N 1 Berbah. The research instruments used include validation sheet comic science worksheet and questionnaire responses of students to assess the feasibility of comic science worksheet; observation sheet for assess science environment technology society; pretest and posttest problem solving instrument and observation sheet used to determine the increasing problem solving skill; care attitude observation sheet about environment for achievement of care attitude. The feasibility data were analyzed using conversion in 4 categories; learning implementation is analyzed by using percentage conversion with 5 categories; pretest and posttest using gain score; problem solving skills and student's care attitude were analyzed using conversion percentage of the five categories.*

*The results are (1) the development a comic science worksheet with science environment technology society approach is feasible as teaching material with very good category according to expert lecturer and science teacher; (2) comic science worksheet can increase problem solving skills evidenced by the results of calculations by the gain score with the medium category, supported based on the observation from good enough category became very good category; (3) the attainment of care attitude about environment in very good category.*

**Key Word:** *Comic Science Worksheet, SETS, Problem Solving, Care Attitude about Environment*